

The current invention satisfies a long felt but unsolved need of producing a rowing device that allows a rower to use a traditional rowing stroke while facing the direction to which the rower wants to row (i.e. facing forward while rowing forward), works in a manner that prevents instability in the water, and allows for convenient travel as by being mounted on a car.

As will be seen, claim 1 has been reworded and includes the phrase, “said starboard and said port side outrigger mounted in said foot operated outrigger drive mechanism such that the outrigger moves in substantially the opposite direction as the footpad when said footpad is being *pushed*; said outrigger mounted in said foot operated drive mechanism such that the outrigger moves in substantially the opposite direction as the footpad when said footpad is being *pulled*.” This *clearly* is not present in either the ‘719 or ‘250 duPont patent, and is therefore patentable despite these two references.

It is not in anyway admitted that any of the cited prior by the examiner anticipates or is an obvious variation of existing art. These changes have been made only to achieve clarity, and to put the claims in more traditional form.

Claim 1 (canceled)

Claim 2 (new). A rowing device comprising:

- a foot operated outrigger drive mechanism having at least one footpad and a port side outrigger and a starboard side outrigger;
- said footpad suitable for pushing with the feet;
- wherein the port side outrigger is suitable for being on the port side of a rowboat and the starboard outrigger is suitable for being on the starboard side of said rowboat;
- said port side and starboard side outriggers respectively having an outboard end and an inboard end;
- said starboard and said port side outrigger mounted in said foot operated outrigger drive mechanism such that the outrigger moves in substantially the opposite direction as the footpad when said footpad is being pushed; said outrigger mounted in said foot operated drive mechanism such that the outrigger moves in substantially the opposite direction as the footpad when said footpad is being pulled.

Claim 3 (new) The rowing device of claim 1 further comprising:

- said footpad suitable for being slidably mountable in a hull of a row boat so that when one pushes on the footpad with their feet, the rower’s body remains in substantially the same position with respect to said hull of said rowboat while propelling the footpad forward with their feet.

Claim 4 (new) The rowing device of claim 1 further comprising:

a port side articulating oar attached to said port side outrigger;
a starboard side articulating oar attached to said starboard side outrigger;
said port side articulating oar having a blade shaft and a handgrip shaft
wherein said blade shaft and handgrip shaft are attached by an articulating
mechanism;
said starboard side articulating oar having a blade shaft and a handgrip shaft
wherein said blade shaft and handgrip shaft are attached by an articulating
mechanism.

Claim 5 (new) The rowing device of claim 3 further comprising:

said articulation of said port side oar being such that when said port side oar handgrip shaft is pulled from bow to stern during the power stroke, the port side oar blade shaft moves substantially longitudinally in the same direction, also from bow to stern;

said articulation of said starboard side oar being such that when said starboard side oar handgrip shaft is pulled from bow to stern during the power stroke, the starboard side oar blade shaft moves substantially longitudinally in the same direction, also from bow to stern;

said articulation of said port side oar and starboard oar being so that when said handgrip segments of the port side and starboard oars are pulled a rower pulling the handgrip segments of the port side and starboard side oars would face the direction the rowboat is moving.

Claim 6 (new) The rowing device of claim 4 further comprising:

said articulation of said port side oar being such that when said port side oar handgrip shaft is pushed from stern to bow during the return stroke, the port side oar blade shaft moves substantially longitudinally in the same direction, also from stern to bow;

said articulation of said starboard side oar being such that when said starboard side oar handgrip shaft is pushed from stern to bow during the return stroke, the starboard side oar blade shaft moves substantially longitudinally in the same direction, also from stern to bow.

Claim 7 (new) The rowing device of claim 5 further comprising:

said footpad suitable for being slidably mountable in a hull of a row boat so that when one pushes on the footpad with their feet, the rower's body remains in substantially the same position with respect to said hull of said rowboat while propelling the footpad forward with their feet.

Claim 8 (new) The rowing device of claim 5 further comprising:

said port side oar's blade shaft having a blade substantially at the outer end for contact with water and propelling a rowboat through water when moved through the water during the power stroke;

said articulation of said port side oar being such that when said port side oar handgrip shaft is pulled from bow to stern during the power stroke, the port side

oar blade is substantially perpendicular with the surface of the water so as to maximize the amount of water being pushed by the blade;

said starboard oar's blade shaft having a blade substantially at the outer end for contact with water and propelling a rowboat through water when moved through the water during the power stroke;

said articulation of said starboard oar being such that when said starboard oar handgrip shaft is pulled from bow to stern during the power stroke, the starboard oar blade is substantially perpendicular with the surface of the water so as to maximize the amount of water being pushed by the blade;

Claim 9 (new) The rowing device of claim 5 further comprising:

said articulation of said port side oar being such that when said port side oar handgrip shaft is pushed from stern to bow during the return stroke, the port side oar blade shaft is auto-feathered and is substantially parallel with the surface of the water to minimize wind resistance;

said articulation of said starboard side oar being such that when said starboard side oar handgrip shaft is pushed from stern to bow during the return stroke, the starboard side oar blade shaft is auto-feathered and is substantially parallel with the surface of the water to minimize wind resistance.

Claim 10 (new) The rowing device of claim 6 further comprising:

said articulation of said port side oar being such that when said port side oar handgrip shaft is pushed from stern to bow during the return stroke, the port side oar blade shaft is auto-feathered and is substantially parallel with the surface of the water to minimize wind resistance;

said articulation of said starboard side oar being such that when said starboard side oar handgrip shaft is pushed from stern to bow during the return stroke, the starboard side oar blade shaft is auto-feathered and is substantially parallel with the surface of the water to minimize wind resistance.

Claim 11 (new) The rowing device of claim 7 further comprising:

said articulation of said port side oar being such that when said port side oar handgrip shaft is pushed from stern to bow during the return stroke, the port side oar blade shaft is auto-feathered and is substantially parallel with the surface of the water to minimize wind resistance;

said articulation of said starboard side oar being such that when said starboard side oar handgrip shaft is pushed from stern to bow during the return stroke, the starboard side oar blade shaft is auto-feathered and is substantially parallel with the surface of the water to minimize wind resistance.

Claim 12 (new) The rowing device of claim 1 further comprising the port side outrigger being attached to the starboard side outrigger so as to form an outrigger assembly having a port side and a starboard side

- Claim 13 (new) The rowing device of claim 2 further comprising the port side outrigger being attached to the starboard side outrigger so as to form an outrigger assembly having a port side and starboard side.
- Claim 14 (new) The rowing device of claim 4 further comprising the port side outrigger being attached to the starboard side outrigger so as to form an outrigger assembly having a port side and starboard side.
- Claim 15 (new) The rowing device of claim 5 further comprising the port side outrigger being attached to the starboard side outrigger so as to form an outrigger assembly having a port side and starboard side.
- Claim 16 (new) The rowing device of claim 6 further comprising the port side outrigger being attached to the starboard side outrigger so as to form an outrigger assembly having a port side and starboard side.
- Claim 17 (new) The rowing device of claim 9 further comprising the port side outrigger being attached to the starboard side outrigger so as to form an outrigger assembly having a port side and starboard side.
- Claim 18 (new) The rowing device of claim 10 further comprising the port side outrigger being attached to the starboard side outrigger so as to form an outrigger assembly having a port side and starboard side.
- Claim 19 (new) The rowing device of claim 5 where the port oar and starboard oar articulation is a bevel gear.
- Claim 20 (new) The rowing device of claim 8 where the port oar and starboard oar articulation is a bevel gear.
- Claim 21 (new) The rowing device of claim 10 where the port oar and starboard oar articulation is a bevel gear.
- Claim 22 (new) The rowing device of claim 13 wherein outrigger assembly is connected to the footpad with a system of one or more sheaves and one or more cables that cause the outrigger assembly to travel in the opposite direction as the footpad.
- Claim 23 (new) The rowing device of claim 4 wherein port side outrigger and starboard outrigger is connected to the footpad with a system of one or more sheaves and one or more cables that cause the outrigger assembly to travel in the opposite direction as the footpad.
- Claim 24 (new) The rowing device of claim 10 further comprising:
said port side outrigger and starboard outrigger connected to the footpad with a system of one or more sheaves and one or more cables that cause the outrigger assembly to travel in the opposite direction as the footpad;

a rail upon which the footpad rides so as to slide the footpad back and forth.

Claim 25 (new) The rowing device of claim 22 further comprising:

a rail upon which the footpad rides so as to slide the footpad back and forth; said cables being mounted outside of a cowling of a rowboat, and down through the center of the rail.

Claim 26 (new) The rowing device of claim 4 so that the point of articulation of the port side oar attaches substantially to the outboard end of the port side outrigger and the point of articulation of the starboard side oar attaches substantially to the outboard end of the starboard side outrigger.

Claim 27 (new) The rowing device of claim 7 so that the point of articulation of the port side oar attaches substantially to the outboard end of the port side outrigger and the point of articulation of the starboard side oar attaches substantially to the outboard end of the starboard side outrigger.

Claim 28 (new) The rowing device of claim 8 further comprising:

said port side and starboard side oar respectively having a manually operated dogging device to fix the oar blade in a vertical position (perpendicular to the surface of the water) and to turnoff the auto-feathering.

Claim 29 (new) The rowing device of claim 10 further comprising:

said port side and starboard side oar respectively having a manually operated dogging device to fix the oar blade in a vertical position (perpendicular to the surface of the water) and to turnoff the auto-feathering.



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